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(FILE 'HOME' ENTERED AT 08:15:35 ON 01 JUN 2004)

FILE 'MEDLINE, CAPLUS' ENTERED AT 08:15:50 ON 01 JUN 2004

L1 4031 S (UNCOUPLING PROTEIN?) OR UCP3?
L2 340 S L1 AND (LONG OR UCP3L)
L3 141 S L2 AND PY<=1999
E GAICOBINO JEAN?/AU
E BOSS OLIVER?/AU
L4 33 S E4
L5 20 S L4 AND L1
L6 19 DUP REM L5 (1 DUPLICATE REMOVED)

=> d an ti so au ab pi l6 8 19

L6 ANSWER 8 OF 19 CAPLUS COPYRIGHT 2004 ACS on STN
AN 2000:548488 CAPLUS
DN 133:205742
TI **Uncoupling protein 3: its possible biological role and**
mode of regulation in rodents and humans
SO Journal of Bioenergetics and Biomembranes (1999), 31(5), 467-473
CODEN: JBBID4; ISSN: 0145-479X
AU Muzzin, Patrick; **Boss, Olivier**; Giacobino, Jean-Paul
AB A review, with 44 refs. The recently discovered **uncoupling protein 3 (UCP3)** is highly homologous to the mitochondrial inner membrane protein UCP1, which generates heat by uncoupling the respiratory chain from oxidative phosphorylation. The thermogenic function of UCP1 protects against cold and regulates the energy balance in rodents. We review in vitro studies investigating the uncoupling activity of **UCP3** and in vivo studies, which address **UCP3** gene expression in brown adipose tissue and skeletal muscle under various metabolic conditions. The data presented are, for the most, consistent with an uncoupling role for **UCP3** in regulatory thermogenesis. We also discuss mediators of **UCP3** regulation and propose a potential role for intracellular fatty acids in the mechanism of **UCP3** modulation. Finally, we hypothesize a role for **UCP3** in the metabolic adaptation of the mitochondria to the degradation of fatty acids.

L6 ANSWER 19 OF 19 CAPLUS COPYRIGHT 2004 ACS on STN
AN 1997:347633 CAPLUS
DN 127:62216
TI **Uncoupling protein-3: a new member of the**
mitochondrial carrier family with tissue-specific expression
SO FEBS Letters (1997), 408(1), 39-42
CODEN: FEBLAL; ISSN: 0014-5793
AU **Boss, Olivier**; Samec, Sonia; Paoloni-Giacobino, Ariane; Rossier, Colette; Dulloo, Abdul; Seydoux, Josiane; Muzzin, Patrick; Giacobino, Jean-Paul
AB Brown adipose tissue (BAT) and skeletal muscle are important sites of nonshivering thermogenesis. The **uncoupling protein-1 (UCP1)** is the main effector of nonshivering thermogenesis in BAT and the recently described ubiquitous UCP2 has been implicated in energy balance. In an attempt to better understand the biochem. events underlying nonshivering thermogenesis in muscle, we screened a human skeletal muscle cDNA library and isolated three clones: UCP2, **UCP3L** and **UCP3S**. The novel **UCP3** was 57% and 73% identical to human UCP1 and UCP2, resp., highly skeletal muscle-specific and its expression was unaffected by cold acclimation. This new member of the UCP family is a candidate protein for the modulation of the respiratory control in skeletal muscle.

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